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<p>(21) International Application Number: PCT/IE97/00043 (22) International Filing Date: 26 June 1997 (26.06.97) (30) Priority Data: S960472 26 June 1996 (26.06.96) IE S970187 13 March 1997 (13.03.97) IE (71)(72) Applicant and Inventor: MOONEY, Patrick, Roy [IE/IE]; 20 Temple Square, Dартry, Dublin 6 (IE). (74) Agent: MACLACHLAN & DONALDSON; 47 Merrion Square, Dublin 2 (IE).</p>		<p>(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p>

Can be oak
Can float

freely floating

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CONTAINER AND METHOD FOR AGEING WHISKEY

The present invention relates to ageing spirits and more particularly to a method and an apparatus for facilitating the ageing of whiskey.

It is well known to use sherry casks in the production of whiskey for ageing and maturing to produce a full-bodied whiskey. It is also appreciated that the wood used for the ageing of whiskey in casks is important to the quality to the final product. European oak (*Quercus robur* and *Quercus sessilis*) is considered the superior species.

The term "whiskey" used herein refers also to whiskey of Scottish origin and other varieties of malt and/or grain based spirits. It will be appreciated that the apparatus of the invention may also be used for wines, fortified wines and other spirits requiring a maturation phase.

It is an object of the present invention to provide a method and an apparatus for facilitating the production of full-bodied flavoursome whiskies.

Accordingly, the present invention provides a non-wooden container for storage and retail sale of a generally matured whiskey, the container including a wood component for the continued maturation of the whiskey contained therein.

The wood components are provided to facilitate the contact of the generally mature whiskey with an area of wood to add further flavour characteristics to the whiskey.

Preferably, the wood components include a surface exposed to the air surrounding the container so that natural

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evaporation of whiskey components may occur to simulate the evaporation phenomenon of wooden casks.

The container preferably comprises a glass or ceramic
5 bottle or container.

In a preferred construction the container is a bottle for
storage, distribution and sale of whiskey in a retail
environment, the bottle comprising a body and a cap, in
10 which a wood component is added to the bottle to provide
an area of wood for contacting with the whiskey disposed
therein and includes a surface contacting the air
surrounding the bottle.

15 Preferably, the wood component passes through the body of
the bottle and is fixed relative thereto.

Conveniently, means are provided to facilitate the
expansion (or contraction) of the wood component.

20

In one arrangement the wood component is formed to float
freely in whiskey contained in the container.

The wood component is profiled or shaped to increase the
25 surface area available for contact with the whiskey and
to decrease the volume occupied thereby in a container.

Advantageously, the wood component has been used as part
of a cask in the maturation of sherry and/or spirits,
30 such as malt spirits. This arrangement facilitates the
use of wood components from casks which have reached the
end of their useful life.

The wood component may be aesthetically shaped, by
35 carving for example and may carry an indication of the

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origin, character and/or maturation date thereon.

5 The wood component may be crafted to present an object having a low volume and high surface area such as a ship in a bottle.

10 The present invention further provides a method for ageing whiskey, the method including removing a generally matured whiskey from a first wooden cask and transferring the matured whiskey to a supplementary non-wooden container for storage and further maturation, the supplementary container including a wood component for the continued maturation of the whiskey contained therein.

15 The method utilises a wood component which includes a surface exposed to the air surrounding the supplementary container so that natural evaporation of whiskey components may occur to simulate the evaporation phenomenon of wooden casks.

20 Preferably, the wood component is provided with a charred layer or a layer of activated carbon to increase the complexity of the matured whiskey.

25 Advantageously, the wood component is profiled or shaped to increase the surface area available for contact with whiskey and to decrease the volume occupied in the container.

30 Preferably, the wood component is formed of oak, for example, European oak.

35 The invention will now be described more particularly with reference to the accompanying drawing which shows, by way of example only, one embodiment of container according to

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the present invention. In the drawing:

Figure 1 is a sectional side elevation combining four different constructions of the wood component for use with the supplementary container for ageing spirits.

Wines and spirits undergo a slow maturation process which is conducted in oak barrels to achieve the highest quality and most flavoursome product. Unfortunately, the demand for oak barrels is such that alternative or accelerated processes are sought. In the method of the present invention, a generally mature spirit, having undergone the stages of maturation in a oak barrel is transferred to a supplementary container where it is allowed to continue to mature further.

The supplementary container for ageing spirits comprises a bottle 50 having a glass body 52 and a cap 54. Four constructions of wood component are shown in Figure 1 in which the wood component presents a surface to the whiskey stored in the bottle. All four constructions need necessarily not be used together in one bottle.

In the first construction, a wood component 65 such as a shaped piece of toasted or charred European oak is freely floating within the bottle of whiskey. Further maturation of the whiskey is facilitated and the flavour is allowed to develop in the bottle over a storage period. The wood component 65 is optionally crafted to indicate the origin of the whiskey or a minimum maturation date 67. Other shapes may include a shamrock for Irish whiskey, a thistle or heather for Scottish whisky, figurines of animals or birds or a representative element from the logo or trade mark of the producer. For example, a grouse for "Famous Grouse", a bell for "Bell's" whisky, a mortarboard for

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"Teachers" or a sailing ship for "Cutty Sark". All of these brands are registered trade marks.

5 The second, third and fourth constructions each comprise a wood component 75,80,85 which is secured to the glass body 52 of the bottle 50. The second construction comprises a wood component 75 which is secured to the base 56 of the bottle 50, the third construction comprises a wood component 80 which is secured to the sloping area adjacent the neck 58 of the bottle 50 and the fourth construction 10 comprises a wood component 85 which is secured to the curved side wall of the bottle 50. In each construction, the wood component 75,80,85 is either adhered to the inner surface of the glass body 52 or penetrates the wall of the 15 body 52 to present a surface 77,82,87 to the air surrounding the bottle 50. The surface 77,82,87 presented to the air is flush with or protrudes marginally from the outer surface of the bottle body 52.

20 Each of the above constructions 65,75,80,85 allow generally mature whiskey to be bottled and presented for sale for a consumer.

25 It is considered that the invention would have particular appeal in the marketing of whiskey and other spirits which improve with maturation.

30 It will of course be understood that the invention is not limited to the specific details described herein, which are given by way of example only, and that various modifications and alterations are possible within the scope of the invention as defined in the appended claims.

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CLAIMS:

1. A non-wooden container (50) for storage and retail
sale of a generally matured whiskey, the container (50)
5 including a wood component (65,75,80,85) for the continued
maturation of the whiskey contained therein.
2. A container as claimed in claim 1, in which the wood
component includes a surface (72,82,87) exposed to the air
10 surrounding the container (50) so that natural evaporation
of whiskey components may occur to simulate the
evaporation phenomenon of wooden casks.
3. A container as claimed in either claims 1 or claim 2,
15 in which the container is a glass or ceramic bottle (50).
4. A container as claimed in claim 3, in which the
container is a bottle (50) for storage, distribution and
sale of whiskey in a retail environment, the bottle
20 comprising a body (52) and a cap (54), with the wood
component (65,75,80,85) being added to the bottle (50) to
provide an area of wood for contacting with the whiskey
disposed therein and including a surface (77,82,87)
contacting the air surrounding the bottle.
25
5. A container as claimed in claim 4, in which the wood
component passes through the body of the bottle and is
fixed relative thereto.
- 30 6. A container as claimed in claim 5, in which means are
provided to facilitate the expansion (or contraction) of
the wood component.
7. A container as claimed in any of the preceding claims,
35 in which the wood component is formed to float freely in

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whiskey contained in the container.

8. A container as claimed in any one of the preceding claims, in which the component is profiled and shaped to
5 increase the surface area available for contact with the whiskey and to decrease the volume occupied thereby in a container.
9. A container as claimed in any one of the preceding
10 claims, in which the wood component is taken from the wood of a cask previously used in the maturation of sherry and/or spirits, such as malt spirits.
10. A container as claimed in any one of the preceding
15 claims, in which the wood component is aesthetically shaped, by carving for example, and carries an indication of the origin, character and/or maturation date thereon.
11. A container as claimed in anyone of the preceding
20 claims, in which the wood component is crafted to present an object having a low volume and high surface area such as a ship in a bottle.
12. A method for ageing whiskey, the method including
25 removing a generally matured whiskey from a first wooden cask and transferring the matured whiskey to a supplementary non-wooden container for storage and retail sale, the supplementary container including a wood component for the continued maturation of the whiskey
30 contained therein.
13. A method for ageing whiskey as claimed in claim 12, in which the wood component includes a surface exposed to the air surrounding the supplementary container so that
35 natural evaporation of whiskey components may occur to

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simulate the evaporation phenomenon of wooden casks.

14. A method for ageing whiskey as claimed in either claim 12 or claim 13, in which the wood component is provided with a charred layer or a layer of activated carbon to increase the complexity of the matured whiskey.

15. A method ageing whiskey as claimed in any one of of claims 12 to 14, in which the wood component is profiled or shaped to increase the surface area available for contact with whiskey and to decrease the volume occupied in the container.

16. A method of ageing whiskey as claimed in any one of claims 12 to 15, in which the wood component is formed of oak, for example, European oak.

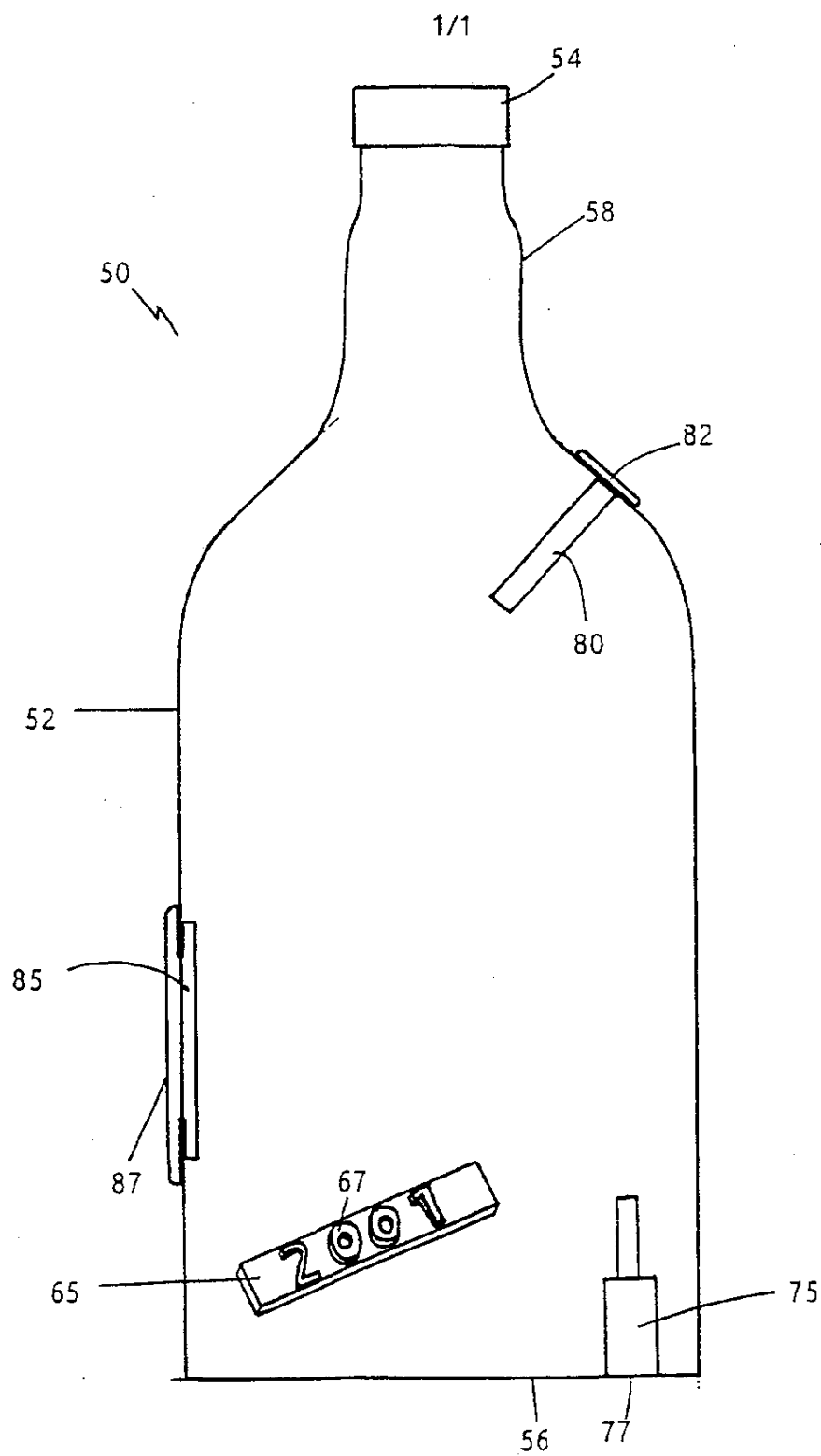


FIGURE 1

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IE 97/00043

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12H1/22 C12G3/07

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12H C12G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 876 692 A (H.J. GAISMAN) 10 March 1959 see page 1, column 1, line 55 - line 65 see column 2, line 42 - line 44 ---	1-5,13, 14,16
X	GB 2 188 902 A (BROWN JAMES ALLESTREE) 14 October 1987 see page 1, column 2, line 93 - line 116; claims; figures ---	1-5,13, 16
X	US 2 114 009 A (S.R. RAMSAY) 12 April 1938 see page 1, column 1, line 21 - page 2, column 1, line 38 ---	1-6,8, 13-16
X	DE 93 17 842 U (SCHERER VOLKER DR) 27 January 1994 see claims ---	1-4,16
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☒ Further documents are listed in the continuation of box C.

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Date of the actual completion of the international search

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 203 229 A (O.F. NILSSON & K.F. NILSSON) 4 June 1940 see page 2, column 1, line 37 - column 2, line 2 see page 2, column 2, line 65 - line 72; claims; figures ---	1-4,7,8, 10,13,14
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X	DE 15 17 877 A (A. THEESS) 12 February 1970 see the whole document ---	1,3,4,7, 12,16
A	GB 500 081 A (T.T. MILLER) 2 March 1939 see page 1, column 1, line 25 - line 45; claims -----	1,7,9, 14,16

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/IE 97/00043

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